Garant

GARANT Master Steel FEED solid carbide drill, plain shank DIN 6535 HA, TIAIN, Ø DC h7 (mm or inch): 11,3



Order data

Order number	122435 11,3
GTIN	4045197787187
Item class	11E

Description

Version:

3-flute drill, specially developed for **use at very high feed rates**. Extremely suitable for **machines with high power** output and stable machining conditions.

- Special point geometry with stable cutting edges and large clearance at the centre permits very high feed rates.
- The patented point geometry is optimised for chip flow and generates low cutting forces with good chip breakage.
- With 145° point angle for low burr formation when drilling through holes.

The **sector-leading technology of the chisel point** guarantees **optimum self-centring behaviour** and permits spot drilling on irregular surfaces. 3 guide chamfers guarantee a stable exit from the hole and an exact roundness of the hole.

Note:

Flute length $L_c = L_2 + 1.5 \times D_c$.

HB and HE shanks are available at the same price as HA.
For **HB shanks:** use order **No. 122436**.
For **HE shanks:** use order **No. 122435** + **129100HE**.

Standard: DIN 6537 K

Tolerance nominal Ø: h7

Number of cutting edges Z: 3

Tolerance nominal Ø: h7

recommended maximum drilling depth L2: 38.1 mm

Overall length L: 102 mm

Shank Ø D_s: 12 mm

Feed f in steel < 1100 N/mm²: 0.5 mm/rev.

Technical description

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Data sheet

Nominal Ø Dc11.3 mmShank Ø Ds12 mmrecommended maximum drilling depth L238.1 mmSeriesMaster SteelCoatingTiAINTool materialsolid carbideVersion4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-Standardyes	Tolerance nominal Ø	h7		
StandardDIN 6537 KOverall length L102 mmFeed f in steel < 1100 N/mm²	Number of cutting edges Z	3		
Overall length L102 mmFeed f in steel < 1100 N/mm²	Flute length L _c	55 mm		
Feed f in steel < 1100 N/mm²0.5 mm/rev.Nominal Ø Dc11.3 mmShank Ø Ds12 mmrecommended maximum drilling depth L238.1 mmSeriesMaster SteelCoatingTiAINTool materialsolid carbideVersion4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Standard	DIN 6537 K		
Nominal Ø Dc11.3 mmShank Ø Ds12 mmrecommended maximum drilling depth L238.1 mmSeriesMaster SteelCoatingTiAlNTool materialSolid carbideVersion4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Overall length L	102 mm		
Shank Ø Ds12 mmrecommended maximum drilling depth L238.1 mmSeriesMaster SteelCoatingTiAINTool materialsolid carbideVersion4×DPoint angle145°ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Feed f in steel < 1100 N/mm ²	0.5 mm/rev.		
recommended maximum drilling depth L ₂ 38.1 mm Series Master Steel Coating TiAlN Tool material Solid carbide Version 4×D Point angle 145 ° Shank DIN 6535 HA to h6 Through-coolant Yes, with 25 bar Machining strategy HPC Semi-Standard yes Colour ring Green	Nominal Ø D _c	11.3 mm		
SeriesMaster SteelCoatingTiAINTool materialsolid carbideVersion4×DPoint angle145°ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Shank Ø D _s	12 mm		
CoatingTiAINTool materialSolid carbideVersion4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	recommended maximum drilling depth L_2	38.1 mm		
Tool materialsolid carbideVersion4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Series	Master Steel		
Version4×DPoint angle145 °ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Coating	TiAIN		
Point angle145°ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Tool material	solid carbide		
ShankDIN 6535 HA to h6Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Version	4×D		
Through-coolantyes, with 25 barMachining strategyHPCSemi-StandardyesColour ringgreen	Point angle	145 °		
Machining strategyHPCSemi-StandardyesColour ringgreen	Shank	DIN 6535 HA to h6		
Semi-Standard yes Colour ring green	Through-coolant	yes, with 25 bar		
Colour ring green	Machining strategy	HPC		
	Semi-Standard	yes		
Type of product Jobber drill	Colour ring	green		
	ype of product Jobber drill			

User data

	Suitability	V _c	ISO code
Steel < 500 N/mm ²	suitable	160 m/min	Р
Steel < 750 N/mm ²	suitable	140 m/min	Р
Steel < 900 N/mm ²	suitable	130 m/min	Р
Steel < 1100 N/mm ²	suitable	110 m/min	Р
Steel < 1400 N/mm ²	suitable	90 m/min	Р
Steel < 55 HRC	suitable	60 m/min	Н

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INOX < 900 N/mm ²	suitable	60 m/min	М
INOX > 900 N/mm ²	suitable	50 m/min	М
Ti > 850 N/mm²	suitable only under restricted conditions	40 m/min	S
GG	suitable	130 m/min	К
GGG	suitable	80 m/min	К
Uni	suitable		
wet maximum	suitable		
wet minimum Services	suitable		

Shank grinding Type HE

129100 HE